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J. H. WETHERILL

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JOURNAL BOX CLEANING TOOL

Filed Nov. 17, 1969

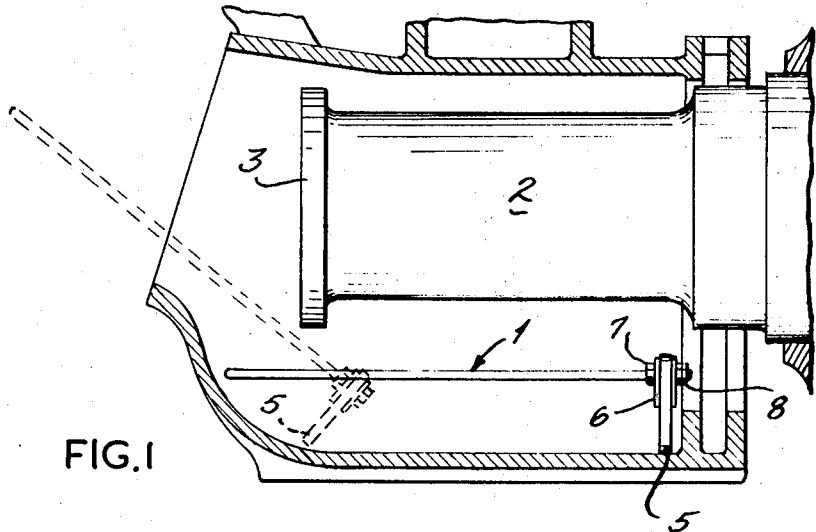


FIG. 1

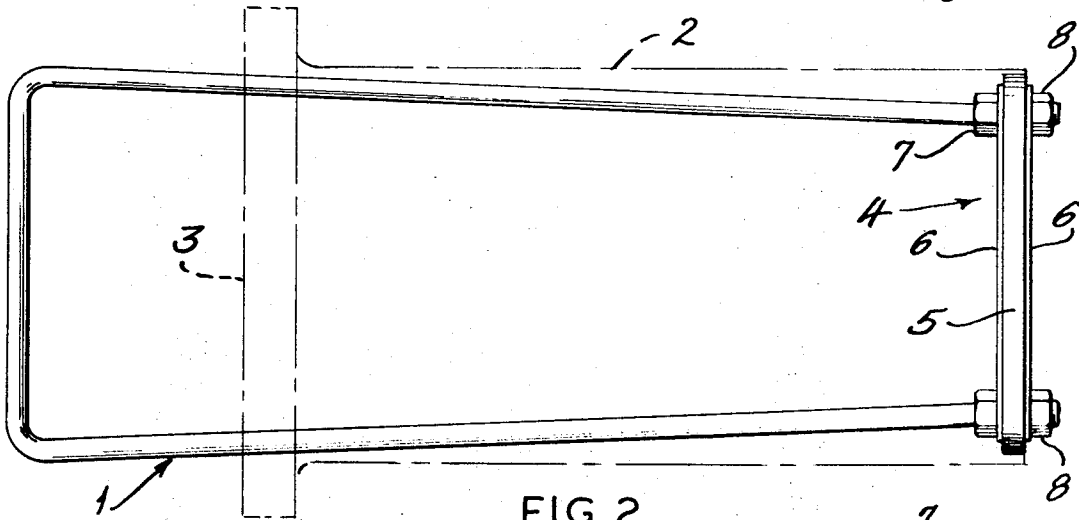


FIG. 2

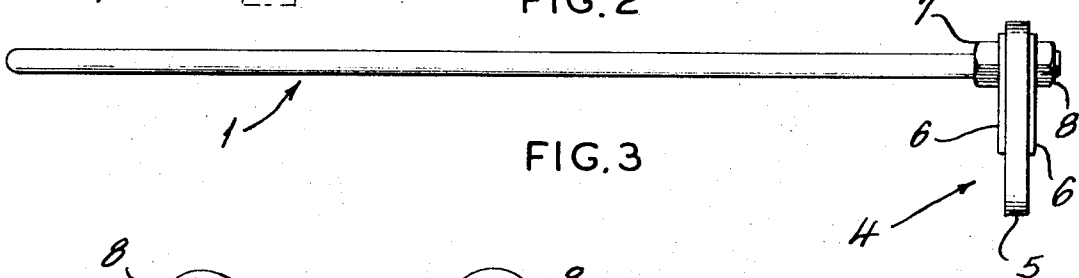


FIG. 3

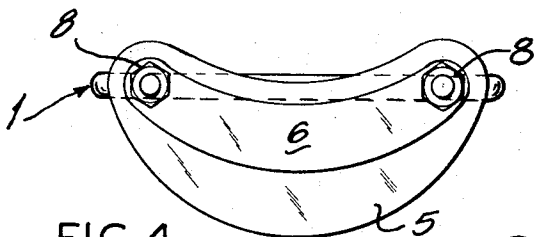


FIG. 4

INVENTOR:
John H. Wetherill
BY *Redell & Burgess*
ATTORNEYS.

1

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JOURNAL BOX CLEANING TOOL
John H. Wetherill, Columbus, Ohio, assignor to
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ABSTRACT OF THE DISCLOSURE

A cleaning tool for insertion into a railway axle journal box and beneath a journal and bearing therein for removing waste, dirt and sediment in the lower portion of the box. The tool comprises an elongated handle with a transverse blade at one end adapted to be inserted under the journal, and adapted to be manipulated freely from the outside of the box.

Preferably, the handle is of a U-shaped adapted to straddle the journal endwise, and the blade is a felt strip with a stiffening plate of less length and width than the felt strip.

BACKGROUND OF THE INVENTION

The conventional means of cleaning accumulations from a journal box is by wiping it out with cloth rags or blowing out the box with compressed air from a hose. Either method may include use of a solvent. Neither method is effective because the journal and its bearings fill a substantial portion of the space in the box, and the back of the box is not readily reached with rags. Nor will the air jet effectively remove an accumulation of grit and oily sediment.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a vertical, longitudinal section through a railway journal box mounted on an axle journal, with the usual bearing and wedge removed for cleaning, and shows the cleaning tool applied.

FIG. 2 is a top view of the tool and shows the general relation between the width of the tool and the width of the journal.

FIG. 3 is a side view of the tool.

FIG. 4 is an end view of the tool showing particularly the contour of the tool blade.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The tool comprises an elongated handle 1, preferably of U-shaped, and of sufficient width to straddle the lower portion of an axle journal 2, and its collar 3, if necessary, and having a transverse blade at the outer ends of the handle legs.

Preferably, the blade comprises a strip of felt 5 sandwiched between two relatively narrow and stiff backing plates 6, of metal or plastic. Nuts 7 and 8 are threaded onto the ends of the handle legs and form shoulders and retainers engaging the stiffening plates.

Felt 5 and plates 6 are generally crescent shape in contour with a length approximating the diameter of the railway axle journal. The curve of the upper edge of the

2

felt strip has a radius approximating the radius of an axle journal, and the curve of the lower edge of the felt strip has a radius approximating the radius of the transverse bottom wall of the journal box.

The tool may be applied through the opening in the outer end of the box when the box is jacked up and the wedge, bearing and the usual waste packing or pad is removed. The blade may be inserted easily beneath the journal toward the rear of the box and may be manipulated upwardly and downwardly, angularly and outwardly of the box to remove the accumulated sediment, dirt, etc.

The felt projects beyond the edges of the backing strips and avoids scratching the journal surface by the edges of strips 6. The felt yields to effectively wipe the box walls and to slide over obstructions.

The details of the structure may be changed without affecting the operation of the tool, and the exclusive use of variations coming within the scope of the invention is contemplated.

What is claimed is:

1. A clean-out tool for a railway axle journal box, including a transverse scraper member at one end comprising a strip of flexible material having an elongated crescent-shaped contour, and a similarly shaped stiffener of relatively unyielding material along side the flexible scraper material strip but terminating inwardly from the edge of the strip substantially throughout its length, and an elongated U-shaped handle having legs spaced apart a substantial distance to straddle a journal endwise and having terminals at one end secured to the end portions of the crescent-shaped stiffener, the legs being united at their opposite ends and forming a handhold for manipulating the scraper member from a point outside of the journal box.

2. A clean-out tool for a railway axle journal box as described in claim 1 in which the ends of the handle legs are relatively close to the ends of the scraper member and relatively remote from the intermediate portion of the convex edge of the scraper member.

3. A clean out tool for a railway axle journal box, as described in claim 1, in which the stiffener comprises two thin metal plates at opposite sides of the flexible material strip.

4. A clean out tool for a railway axle journal box, as described in claim 1, in which the convex curvature of the outer edge of the scraper member corresponds to the concave curvature of the transverse lower wall of a railway axle journal box.

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LEON G. MACKLIN, Primary Examiner

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